Six nuclear power reactors of total capacity of 3160 MWe being constructed by NPCIL and BHAVINI are in advanced stages of construction and the total nuclear power capacity will reach 7280 MWe progressively by the end of XI plan.

The XI Plan proposals envisage commencement of work of 8 indigenous reactors with a total capacity of 5600 MWe by NPCIL. Additions of Fast Breeder Reactors built indigenously and import of Light Water Reactors through imports, depending on the opening of international civil nuclear cooperation, will take the power generation capacity further.

(d) While the public opinion in the country about nuclear power is generally favourable, some activists/NGOs/environmentalists have been expressing location specific concerns, which are addressed suitably by the Government on case by case basis.

Disposal of atomic energy waste

2574. MISS MABEL REBELLO: Will the PRIME MINISTER be pleased to state:

(a) the places where the waste of atomic energy of various plants in India disposed of;

(b) the details thereof, plant-wise and area-wise;

(c) the quantity of atomic energy waste produced annually in India;

(d) whether any study has so far been undertaken on the ill-effects of the waste of atomic energy in India;

(e) if so, the details thereof; and

(f) if not, the reasons therefor?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) to (c) Wastes generated at the Nuclear Power Stations during their operation are of low and intermediate activity level and are managed at the site itself. These wastes are treated, concentrated and immobilized in solid matrices like cement, bitumen, polymers etc. and stored in specially constructed structures such as reinforced concrete trenches and tile holes, located at each site. The amount of waste is about 100 cubic meters per year at each station.

There are also facilities for Research and Development (R&D) in various aspects of isotope production and their application etc. located at Trombay. Mainly low and intermediate level wastes are produced in these facilities. These are also stored at specially designed near surface underground structures similar to those at nuclear power plants.

Besides low level & intermediate level wastes, the high level radioactive wastes are also produced in the spent fuel reprocessing plant. These are immobilised in vitrious matrix and doubly encapsulated. Solid waste so conditioned is stored in air cooled engineered vault facility located inside the boundaries of the installation at Tarapur. The sites where multiple nuclear activities such as R&D, fuel fabrication and fuel reprocessing, are carried out (at Trombay, Tarapur and Kalpakkam), about 400 - 600 cubic meter of radioactive solid waste is disposed annually.

(d) and (e) Extensive study is performed on a given site before design, construction and commissioning of a waste disposal facility. This study includes ground water movement, soil and water analysis, water table, surface water movement, etc. The radioactive waste disposal system uses a multi barrier concept comprising of waste form/matrix, engineered barrier, backfill material and the natural geo-environment to contain and isolate the radioactivity from the environment. The performance of disposal facility is monitored through a systematic surveillance programme consisting of systematic ground water/soil analysis for radioactivity as well as radiation monitoring of the disposal area. No ill effect has been observed either because of the facility or because of waste disposal at the facility.

(f) No applicable.

Aryan coal washery Dipika

†2575. SHRI RAMADHAR KASHYAP: Will the PRIME MINISTER be pleased to refer to the answer to Unstarred Question 1805 given in the Rajya Sabha on the 15th March, 2007 and state:

(a) whether the Aryan Coal Benefication Private Ltd. which is situated on the land given on lease to Dipika Gevra (Village Beltikri) mine by S.E.C.L. is not a barrel coal washery;

† Original notice of the question was received in Hindi.